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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/129,468	08/04/1998	MICHAEL W. PFEIFFER	S01.12-0448	4542

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EXAMINER

TRINH, MINH N

ART UNIT	PAPER NUMBER
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3729

DATE MAILED: 03/26/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/129,468

Applicant(s)

PFEIFFER ET AL.

Examiner

Minh Trinh

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 08 January 2002.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-15 and 21-26 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-15 and 21-26 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. §§ 119 and 120**

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

### DETAILED ACTION

1. The amendment filed in paper No. 10 (dated 01/08/02) has been fully considered and made of record. Claims 1-15 and 21-26 are now pending in this application.

2. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

3. Claims 1-15 and 21-26 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Is the phrase: "individual components" (claim 1, line 12), and "each stack of components" (claim 2, line 5), etc., the same as "assembly components" (claim 1, line 7).

The phrases: " the carousel coupling device" (claim 3, lines 1-2), and "the unassembled device" (claim 21, line 4), lack proper antecedent bases.

4. Claims 1 and 21 as best understood are rejected under 35 U.S.C. 102(b) as being clearly anticipated by US patent 5,606,153 Fix, Sr. et al.

Fix, Sr. et al teach an assembly apparatus of the present invention including an assembly arm 104, and assembly arm driver 102 coupled to the assembly arm 104 to operate the assembly arm and to unload components 109's and load the components in the unassembled device 108 (see figure 1, col. 2, lines 33-50) and assemble the unloaded component into the data storage device (whole station assembly 106). It is noted that Fix, Sr. et al structure do not disclose the exact data storage device as being

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claimed by the present invention, however the applied art discloses the storage means 107 is substantially equal to the broadly claimed "data storage device" of the present invention. Thus, the designation item 107 of the applied art is broadly representing the storage device as being claimed by the applicant.

5. Claims 2-5 as best understood are rejected under 35 U.S.C. 103(a) as being unpatentable over Fix, Sr. et al in view of US patent 5,077,888 to Tokisue et al.

Fix, Sr. et al teach the present invention except to disclose a motor coupled to the carousel base and a vacuum source operably coupled to the base. Tokisue et al teach such that a spindle or motor 4 coupled to the carousel base 6 (see figure 1, col. 5, lines 45-47) and a vacuum source 22, 74 operatively associated with the base 1, 6 (figures 5, 18, discussed at col. 7-8). It would have been obvious to one having skill in the art to incorporate the teaching of a motor coupled to the carousel base including a vacuum source operatively associated with therewith as taught by Tokisue et al onto the invention of Horning et al in order to provide a means for positioning of the parts with respect to the base effectively and efficiently.

6. Claims 6-10 as best understood are rejected under 35 U.S.C. 103(a) as being unpatentable over Fix, Sr. et al in view of Tokisue et al.

Fix, Sr. et al or Tokisue et al as applied and relied upon above teach the present invention except to disclose a plurality of carousel bases. It would have been obvious to one having ordinary skill in the art at the time the invention was made to have provided a number of carousel bases couple to the apparatus, since it has been held that mere duplication of the essential working parts of a device involves only routine skill in the art.

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In the instant case the broadly claimed apparatus includes another duplication of carousel base to form a number of bases on a same device involves only routine skill in the art.

Limitations of 7-10 are also met as set forth above.

7. Newly submitted claim 22 is rejected under 35 U.S.C. 103(a) as being unpatentable over Fix, Sr. et al in view of Tokisue et al as applied above and further in view of US patent 4,835,711 to Hutchin et al.

Fix, Sr. et al or Tokisue et al as applied and relied upon above claim 6, do not teach the detecting means which coupled to the assembly arm. Hutchin et al teach such that detecting means by a sensor 104 (see Fig 2, col. 8, lines 45-52) for positioning the work piece. Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to employ the teaching of detecting means by sensor as taught by Hutchin et al on to the modified Fix, Sr. et al invention for the benefit of positioning and/or mounting purpose.

8. Newly submitted claims 23 -26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Fix, Sr. et al in view of US patent 4,481,752 to Sabel.

Fix, Sr. et al teach an assembly apparatus of the present invention including an assembly arm 104, and assembly arm driver 102 coupled to the assembly arm 104 to operate the assembly arm and to unload components 109's and load the components in the unassembled device 108 (see figure 1, col. 2, lines 33-50), a controller coupled to the assembly arm (see demonstration of figure 1). Note that item 107 of the applied art is

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readable as the claimed component of the present invention. Note that each of 111 sections of 108 (Fig. 2 of Fix, Sr. et al) is readable as one of the carousels bases. Fix, Sr. et al meet all the aspect of the present invention except for the plurality of assembly arms Sabel teach a plurality of assembly arms 37, 53, 57 etc on the loading apparatus. It would have been obvious to one having skill in the art to apply the teaching of a plurality of assembly arms such material as taught by Sabel on the invention of Fix, Sr. et al for various well known benefits including loading and unloading the working part more efficiently.

Limitations of claims 24-26 are met as set forth above.

Regarding claim 26, Fix, Sr. et al disclose the disc containers are being removably a plurality of latches (figure 2 of Fix, Sr. et al shows disc containers 111's supported by latches of the casing 108).

### ***Response to Arguments***

9. Applicant's arguments have been acknowledged.
10. Applicant's arguments with respect to claims 1-15 and 21 have been considered but are moot in view of the new ground(s) of rejection.

### ***Allowable Subject Matter***

11. Claims 11-15 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, second paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

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***Conclusion***

12. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

13. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

14. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Minh Trinh whose telephone number is (703) 305-2887. The examiner can normally be reached on Monday -Thursday 8:00 am to 4:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Peter Vo can be reached on (703) 308-1789. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 305-7307 for regular communications and (703) 305-3579 for After Final communications.

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Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-1148.

mt  
March 15, 2002

A handwritten signature in black ink, appearing to read 'Peter Vo', with a long horizontal flourish extending to the right.

**PETER VO**  
**SUPERVISORY PATENT EXAMINER**  
**TECHNOLOGY CENTER 3700**